Application No.: Unknoy Docket No.: BB1165 US

19. The polynucleotide of <u>claim</u> 16 comprising the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, or SEQ ID NO:7.

20. The polynucleotide of claim 16, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, or SEQ ID NO:8.

- 21. The polynucleotide of claim 16, wherein the polypeptide is a myo-inositol-1 (or 4)-monophosphatase.
- 22. An isolated polypeptide, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, or SEQ ID NO:8 have at least 80% identity based on the Clustal alignment method.
- 23. The polypeptide of Claim 22, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, or SEQ ID NO:8 have at least 90% identity based on the Clustal alignment method.
- 24. The polypeptide of Claim 22, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, or SEQ ID NO:8 have at least 95% identity based on the Clustal alignment method.
- 25. The polypeptide of claim 22, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, or SEQ ID NO:8.
- 26. The polypeptide of claim 22, wherein the polypeptide is a myo-inositol-1 (or 4)-monophosphatase.
- 27. A chimeric gene comprising the polynucleotide of claim 26 operably linked to a regulatory sequence.
 - 28. A vector comprising the polynucleotide of claim 26.
- 29. A method for transforming a cell comprising transforming a cell with the polynucleotide of claim 26.
 - 30. The cell produced by the method of claim 29.
- 31. An isolated polynucleotide comprising a nucleotide sequence comprised by the polynucleotide of claim 26, wherein the nucleotide sequence contains at least 30 nucleotides.
 - 32. An isolated polynucleotide comprising:
- (a) a nucleotide sequence encoding a polypeptide, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, or SEQ ID NO:20 have at least 80% identity based on the Clustal alignment method, or
 - (b) the complement of the nucleotide sequence.
- 33. The polynucleotide of Claim 32, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, or SEQ ID NO:20 have at least 90% identity based on the Clustal alignment method.

F.

Application No.: Unkno Docket No.: BB1165 US

- 34. The polynucleotide of Claim 32, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, or SEQ ID NO:20 have at least 95% identity based on the Clustal alignment method.
 - 35. The polynucleotide of claim 32 comprising the nucleotide sequence of SEQ ID NO:9, SEQ ID NO:11, SEQ ID NO:13, SEQ ID NO:15, SEQ ID NO:17, or SEQ ID NO:19.
 - 36. The polynucleotide of claim 32, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, or SEQ ID NO:20.
 - 37. The polynucleotide of claim 32, wherein the polypeptide is a myo-inositol-1 (or 4)-monophosphatase.
 - 38. An isolated polypeptide, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, or SEQ ID NO:20 have at least 80% identity based on the Clustal alignment method.
 - 39. The polypeptide of Claim 38, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, or SEQ ID NO:20 have at least 90% identity based on the Clustal alignment method.
 - 40. The polypeptide of Claim 38, wherein the amino acid sequence of the polypeptide and the amino acid sequence of SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, or SEQ ID NO:20 have at least 95% identity based on the Clustal alignment method.
 - 41. The polypeptide of claim 38, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:10, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:16, SEQ ID NO:18, or SEQ ID NO:20.
 - 42. The polypeptide of claim 38, wherein the polypeptide is a myo-inositol-1 (or 4)-monophosphatase.
 - 43. A chimeric gene comprising the polynucleotide of claim 32 operably linked to a regulatory sequence.
 - 44. A vector comprising the polynucleotide of claim 32.
 - 45. A method for transforming a cell comprising transforming a cell with the polynucleotide of claim 32.

46. The cell produced by the method of claim 45.

47. An isolated polynucleotide comprising a nucleotide sequence comprised by the polynucleotide of claim 32, wherein the nucleotide sequence contains at least 30 nucleotides.